

**REMARKS**

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1-15 and 22-36 are pending.

**35 U.S.C. §103**

Claims 1-15 and 22-32 are rejected under 35 U.S.C. §103(a) for obviousness over U.S. Patent No. 6,012,083 to Savitzky et al. (hereinafter, "Savitzky"), in view of a document entitled "Java Developer's Guide" (1996) to Jaworski (hereinafter, "Jaworski") (*Office Action* p.2).

Savitzky describes a third-party "agency" computing system that is interposed between one or more Web clients and one or more Web servers to interact with the clients and servers to transfer documents (col.3, lines 32-37). The Web clients and Web servers communicate documents via the agency with HTTP (hypertext transfer protocol) over a communication channel, such as the Internet (col.5, lines 6-12).

Savitzky refers to applets, stating that "client-side code execution is limited to documents in which a server has included applets and is limited to use with applet-aware browsers" (col.2, lines 41-43). This is essentially described in the "Background" section of Applicant's Specification and is an example of the very prior art that Applicant sought to overcome. Applets, by their very nature, raise security issues for local computer systems. In general, computer programs can be configured to cause harm to the local computer system (*Specification* p.2, lines 24-26). Applet viewers prevent harm from execution of an applet. For example, applets are prevented by an applet viewer from writing data to any persistent storage, thus protecting current contents of the persistent storage (*Specification*

1 p.3, lines 2-7). A disadvantage of the isolation of applets is that other computer  
2 processes executing concurrently with and independently of the applet viewer  
3 cannot communicate with the applets (*Specification* p.3, line 28 - p.4, line 1).

4 Jaworski describes a Web server program that receives a request from a  
5 Web browser (i.e., a *GET* method), locates a specified resource, and returns the  
6 requested resource data to the browser (*A Web Server*, p.521). Jaworski provides  
7 an example of how to implement and test the simple Web server program  
8 (*WebServerApp*) to receive a request and return a file or document (pp. 521-526).

9 Contrary to Savitzky and Jaworski, Applicant claims receiving a request for  
10 a document from an applet, where the request specifies a function, the execution  
11 of which performs a task that is unrelated to both generation and retrieval of any  
12 document specified in the request (*see* claim 1, for example). Applicant describes  
13 an interprocess communication mechanism in which applets can receive and  
14 respond to processing requests of other computer processes, and which can send  
15 processing requests to such other computer processes without requiring  
16 modification of applet viewers. Additionally, computer system security is  
17 preserved with interprocess communication because an applet is denied direct  
18 access to computer system resources. (*Specification* p.5, lines 24-25).

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1        **Claim 1** recites a method for serving remote procedure calls from an  
2        applet which executes within an applet viewer which in turn executes in a  
3        computer system that is serving said remote procedure calls, the method  
4        comprising:

5                receiving from the applet which executes in the same computer  
6                system that serves said remote procedure calls, a request for a document  
7                according to a document retrieval protocol implemented on a computer  
8                network;

9                determining that the request specifies a function which is defined  
10              within a computer process executing independently of the applet and applet  
11              viewer and which includes one or more computer instructions, execution of  
12              which performs a task which is unrelated to both generation and retrieval of  
13              any document specified in the request; and

14              executing the function in the same computer system that is executing  
15              said applet and applet viewer to thereby cause execution of the one or more  
16              computer instructions in response to receipt of the request.

17        Savitzky and/or Jaworski do not teach or suggest the combination of  
18        elements recited in claim 1. The Office recognizes that Savitzky describes a client  
19        and server system that communicates information between the systems and does  
20        not teach the combination of elements recited in claim 1 in a "same computer  
21        system" environment (*Office Action* pp.2-3). Furthermore, Savitzky does not  
22        teach or suggest both a request for a document *and* "determining that the request  
23        specifies a function..., execution of which performs a task which is unrelated to  
24        both generation and retrieval of any document specified in the request", as recited  
25        in claim 1.

26        The Office contends that Savitzky at col. 1, line 63 through col. 2, line 43  
27        teaches the elements of claim 1 (*Office Action* p.2). Applicant disagrees because  
28        the cited section of Savitzky describes examples of server-client communications  
29        that teach away from Applicant's claim 1. For example, the Office cites that

1 Savitzky describes a client sending a document request to a server for a document  
2 in the form of a URL to execute a script that is defined in a program on the  
3 server (*Savitzky* col. 2, lines 1-5). The Office disregards, however, that Savitzky  
4 continues the description with "[t]he server generates a document in accordance  
5 with the program and returns that document to the browser." (*Savitzky* col. 2, lines  
6 5-7). This is expressly contrary to the execution of a function "which performs a  
7 task which is *unrelated* to both generation and retrieval of any document specified  
8 in the request", as recited in claim 1. To return a document to a client browser, the  
9 document request of Savitzky would be related to the retrieval of the document.

10 With regards to "applets", Savitzky describes that "[w]ith client-side code  
11 execution, the client requests a document and the returned document contains  
12 program code embedded in the document ..." which can be used for such tasks as  
13 animating graphic elements of a document (*Savitzky* col. 2, lines 25-31). This is  
14 also expressly contrary to "a request for a document" and "determining that the  
15 request specifies a function..., execution of which performs a task which is  
16 *unrelated* to both generation and retrieval of any document specified in the  
17 request", as positively recited in claim 1.

18 The Office recognizes that Savitzky is deficient when stating that "it is  
19 inherent that the script has instructions that are thereby executed when invoked *in*  
20 *order to generate the document*" (*Office Action* p.2). Accordingly, Savitzky does  
21 not describe receiving "a request for a document" and "determining that the  
22 request specifies a function..., execution of which performs a task which is  
23 *unrelated* to both generation and retrieval of any document", as recited in claim 1.

24 Further, the Office recognizes that Savitzky does not request a document  
25 according to a document retrieval protocol, as recited in claim 1. The Office states

1 that "it is also inherent that since the request [in Savitzky] is a request to execute a  
2 script and *not a request for a document*, that the request is unrelated to any  
3 generation or retrieval of a document" (*Office Action* p.2). Additionally,  
4 Applicant disagrees that generating a document is unrelated to the retrieval of the  
5 document, as the Office contends. Savitzky clearly describes that "the server  
6 generates a document in accordance with the program and returns that document  
7 to the browser" (*Savitzky* col. 2, lines 5-7), and that with applets, the client  
8 requests a document and the returned document contains program code embedded  
9 in the document" (*Savitzky* col. 2, lines 25-27). Further, "client-side code  
10 execution is limited to documents in which a server has included applets"  
11 (*Savitzky* col. 2, lines 25-27).

12 Accordingly, claim 1 is allowable over the Savitzky-Jaworski combination  
13 for the many reasons that Savitzky does not teach or suggest the elements recited  
14 in claim 1 as described above, and Applicant respectfully requests that the §103  
15 rejection be withdrawn.

16 Jaworski also does not teach both a request for a document *and*  
17 "determining that the request specifies a function..., execution of which performs  
18 a task which is unrelated to both generation and retrieval of any document  
19 specified in the request", as recited in claim 1. To the contrary, Jaworski describes  
20 a Web server program that receives a request from a Web browser (i.e., a *GET*  
21 method), locates a specified resource, and returns the requested resource data to  
22 the browser (*A Web Server*, p.521). Jaworski further describes how to implement  
23 and test the Web server program (*WebServerApp*) to receive a request and return a  
24 file or document (pp. 521-526).  
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1 Accordingly, claim 1 is allowable over the Savitzky-Jaworski combination  
2 for the reasons that Jaworski also does not teach or suggest the elements recited in  
3 claim 1, and Applicant respectfully requests that the §103 rejection be withdrawn.  
4 Additionally, claims 2-5 and 22 are allowable by virtue of their dependency upon  
5 claim 1.

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7 Claim 6 recites "receiving from the applet ... a request for a document",  
8 and "determining that the request specifies a function which is defined within a  
9 computer process executing independently of the applet and applet viewer and  
10 which includes one or more selected computer instructions, execution of which  
11 performs a task which is unrelated to both generation and retrieval of any  
12 document specified in the request."

13 As described above in the response to the rejection of claim 1, Savitzky  
14 and/or Jaworski do not teach or suggest both a request for a document *and*  
15 "determining that the request specifies a function which is defined within a  
16 computer process executing independently of the applet and applet viewer...,  
17 execution of which performs a task which is unrelated to both generation and  
18 retrieval of any document specified in the request", as recited in claim 6.

19 Accordingly, claim 6, as well as dependent claims 7-10, are allowable over  
20 the Savitzky-Jaworski combination and Applicant respectfully requests that the  
21 §103 rejection be withdrawn.

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23 Claim 11 recites "receiving from the applet ... a request for a document"  
24 and "determining that the request specifies a function which is defined within the  
25 computer process and which includes one or more computer instructions,

1 execution of which performs a task which is unrelated to both generation and  
2 retrieval of any document specified in the request.”

3 As described above in the response to the rejection of claim 1, Savitzky  
4 and/or Jaworski do not teach or suggest both a request for a document *and*  
5 “determining that the request specifies a function which is defined within the  
6 computer process and which includes one or more computer instructions,  
7 execution of which performs a task which is unrelated to both generation and  
8 retrieval of any document specified in the request”, as recited in claim 11.

9 Accordingly, claim 11, as well as dependent claims 12-15, are allowable  
10 over the Savitzky-Jaworski combination and Applicant respectfully requests that  
11 the §103 rejection be withdrawn.

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13 Claim 23 recites a method for serving remote procedure calls  
14 received from an instruction set that executes within a first computer  
15 process, the first computer process executing in a computing device that  
16 serves the remote procedure calls, the method comprising:

17 receiving a request for a data file from the instruction set, the request  
18 according to a data file retrieval protocol;

19 determining that the request for the data file specifies a function  
20 which is defined within a second computer process executing in the  
21 computing device independently of the instruction set and of the first  
22 computer process, the function including one or more computer  
23 instructions, execution of which performs a task which is unrelated to both  
24 generation and retrieval of any data file specified in the request; and

25 executing the function in the computing device to execute the one or  
more computer instructions in response to receipt of the request.

26 Savitzky and/or Jaworski do not teach or suggest the combination of  
elements recited in claim 23 in a single computing device environment. Neither

1 Savitzky nor Jaworski teach both a request for a data file *and* "determining that the  
2 request for the data file specifies a function..., execution of which performs a task  
3 which is unrelated to both generation and retrieval of any data file specified in the  
4 request", as recited in claim 23.

5 Similarly to the rejection of claim 1, the Office contends that Savitzky  
6 teaches the elements of claim 23 (*Office Action* p.5). As described above in the  
7 response to the rejection of claim 1, Savitzky describes examples of server-client  
8 communications that teach away from Applicant's claim 23. For example,  
9 Savitzky describes a client sending a document request to a server for a document  
10 in the form of a URL that refers to a program on the server. The program  
11 generates the document and the server returns the document to the browser  
12 (*Savitzky* col.2, lines 1-7). This is expressly contrary to the execution of a function  
13 "which performs a task which is *unrelated* to both generation and retrieval of any  
14 data file specified in the request", as recited in claim 23.

15 The Office recognizes that Savitzky is deficient when stating that "it is  
16 inherent that the script has instructions that are thereby executed when invoked *in*  
17 *order to generate the document*" (*Office Action* p.5). Accordingly, Savitzky does  
18 not describe receiving a request for a document and performing a task which is  
19 unrelated to the retrieval of any document, as recited in claim 1.

20 Further, the Office recognizes that Savitzky does not request a document  
21 according to a document retrieval protocol, as recited in claim 1. The Office states  
22 that "it is also inherent that since the request [in Savitzky] is a request to execute a  
23 script and *not a request for a document*, that the request is unrelated to any  
24 generation or retrieval of a document" (*Office Action* p.5).

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1 Accordingly, claim 23, as well as dependent claims 24-27, are allowable  
2 over the Savitzky-Jaworski combination and Applicant respectfully requests that  
3 the §103 rejection be withdrawn.

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5 **Claim 28** recites "receiving a request for a data file" and "determining that  
6 the request for the data file specifies a function..., execution of which performs a  
7 task which is unrelated to both generation and retrieval of any data file specified in  
8 the request".

9 As described above in the response to the rejection of claim 23, Savitzky  
10 and/or Jaworski do not teach or suggest both a request for a data file *and*  
11 "determining that the request for the data file specifies a function..., execution of  
12 which performs a task which is unrelated to both generation and retrieval of any  
13 data file specified in the request", as recited in claim 28.

14 Accordingly, claim 28, as well as dependent claims 29-32, are allowable  
15 over the Savitzky-Jaworski combination and Applicant respectfully requests that  
16 the §103 rejection be withdrawn.

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18 **New Claims**

19 New claims 33-36 are presented for examination. Based on the above  
20 discussion regarding Savitzky and Jaworski, Applicant believes that claims 33-36  
21 are also allowable.  
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Conclusion

Pending claims 1-15 and 22-36 are in condition for allowance. Applicant respectfully requests consideration and issuance of the subject application. If any issues remain that preclude issuance of this application, the Examiner is urged to contact the undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

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